



Finding Rule w/ Two Steps

Name: _____

Determine which rule best represents the expression the function machine used.

Answers

1)

Input (L)	2	5	7	10	8
Output	4	7	9	12	10

A. $L \times 6 + 7$ B. $L + 7$
 C. $L \times 2 - 9$ D. $L + 2$

2)

Input (Z)	10	5	2	8	7
Output	91	41	11	71	61

A. $Z + 9$ B. $Z + 10$
 C. $Z \times 10 - 9$ D. $Z \times 9$

3)

Input (G)	8	5	10	2	7
Output	71	41	91	11	61

A. $G \times 10 - 10$ B. $G \times 10$
 C. $G + 10$ D. $G \times 10 - 9$

4)

Input (H)	7	2	5	10	8
Output	65	25	49	89	73

A. $H \times 9 - 9$ B. $H \times 8 + 9$
 C. $H \times 8 + 10$ D. $H \times 8$

5)

Input (U)	10	13	15	18	16
Output	2	5	7	10	8

A. $U \times 8$ B. $U \times 7 - 9$
 C. $U - 8$ D. $U \times 8 + 10$

6)

Input (P)	10	8	5	2	7
Output	16	14	11	8	13

A. $P \times 6 + 6$ B. $P + 6$
 C. $P \times 7 - 5$ D. $P + 5$

7)

Input (K)	7	8	2	5	10
Output	23	25	13	19	29

A. $K \times 2 + 9$ B. $K \times 2$
 C. $K + 9$ D. $K \times 4 + 9$

8)

Input (S)	18	15	20	17	12
Output	8	5	10	7	2

A. $S - 10$ B. $S + 2$
 C. $S + 10$ D. $S \times 2$

9)

Input (N)	7	2	5	10	8
Output	24	14	20	30	26

A. $N \times 2 + 10$ B. $N \times 2$
 C. $N \times 10$ D. $N \times 6 + 10$

10)

Input (T)	10	5	2	7	8
Output	20	10	4	14	16

A. $T \times 2 + 5$ B. $T \times 4 + 4$
 C. $T + 4$ D. $T \times 2$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Finding Rule w/ Two Steps

Name: **Answer Key**

Determine which rule best represents the expression the function machine used.

Input (L)	2	5	7	10	8
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Input (Z)	10	5	2	8	7
Output	91	41	11	71	61

- A. $Z + 9$ B. $Z + 10$
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Input (G)	8	5	10	2	7
Output	71	41	91	11	61

- A. $G \times 10 - 10$ B. $G \times 10$
 C. $G + 10$ D. $G \times 10 - 9$

Input (H)	7	2	5	10	8
Output	65	25	49	89	73

- A. $H \times 9 - 9$ B. $H \times 8 + 9$
 C. $H \times 8 + 10$ D. $H \times 8$

Input (U)	10	13	15	18	16
Output	2	5	7	10	8

- A. $U \times 8$ B. $U \times 7 - 9$
 C. $U - 8$ D. $U \times 8 + 10$

Input (P)	10	8	5	2	7
Output	16	14	11	8	13

- A. $P \times 6 + 6$ B. $P + 6$
 C. $P \times 7 - 5$ D. $P + 5$

Input (K)	7	8	2	5	10
Output	23	25	13	19	29

- A. $K \times 2 + 9$ B. $K \times 2$
 C. $K + 9$ D. $K \times 4 + 9$

Input (S)	18	15	20	17	12
Output	8	5	10	7	2

- A. $S - 10$ B. $S + 2$
 C. $S + 10$ D. $S \times 2$

Input (N)	7	2	5	10	8
Output	24	14	20	30	26

- A. $N \times 2 + 10$ B. $N \times 2$
 C. $N \times 10$ D. $N \times 6 + 10$

Input (T)	10	5	2	7	8
Output	20	10	4	14	16

- A. $T \times 2 + 5$ B. $T \times 4 + 4$
 C. $T + 4$ D. $T \times 2$

Answers

1. **D**

2. **C**

3. **D**

4. **B**

5. **C**

6. **B**

7. **A**

8. **A**

9. **A**

10. **D**